

Claims

What is claimed is:

1. An operator interface for a work machine having a machine display system and a mechanical linkage, comprising:
 - an input device having a series of input mechanisms adapted to generate a linkage input signal to control the motion of the mechanical linkage and adapted to generate a display input signal to input information to the machine display system;
 - a control module adapted to operate in one of a linkage control mode where the motion of the mechanical linkage is controlled and a display control mode where the input of information to the machine display system is controlled; and
 - a switch associated with the interface, the switch being adapted to switch the operating mode between the linkage control mode and the display control mode.
2. The interface of claim 1, wherein the switch is a toggle switch adapted to switch the operating mode of the control module between the linkage control mode and the display control mode.
3. The interface of claim 1, wherein the switch includes logic in the control module, adapted to switch the operating mode between the linkage control mode and the display control mode in response to a toggle signal.
4. The interface of claim 3, wherein the toggle signal is a predetermined manipulation of the input device.

5. The interface of claim 1, wherein control module is adapted to control at least one of a manipulation of information, a movement of a cursor, an input of information, and a selection of selectable functions based on the display input signal when the control module is operating in the display control mode.

6. The interface of claim 5, wherein the selectable functions include at least one of a selection of an operating mode, a selection of machine diagnostics, and a selection of a machine maintenance schedule.

7. The interface of claim 5, wherein the input of information includes at least one of an input of alpha characters, an input of numerical characters, and a selection of an icon.

8. The interface of claim 5, wherein the control module is adapted to control the input of information by at least one of a pop-up menu, a drop-down menu, a scrollable selection, and a selectable icon.

9. The interface of claim 1, wherein the control module is adapted to control the position of at least one of a plurality of hydraulic valves associated with the mechanical linkage in response to the linkage input signal when the control module is operating in the linkage control mode.

10. The interface of claim 1, wherein the input mechanisms of the input device include at least one of a trigger, a plurality of buttons, and a slider.

11. The interface of claim 1, wherein the control module includes:

a first processor adapted to operate in the linkage control mode;
and
a second processor adapted to operate in the display control mode.

12. A method for operating a work machine comprising:
operating an input device in one of a linkage control mode where
the motion of a mechanical linkage is controlled and a display control mode
where an input of information is provided to a display system;
switching the mode of operation of a control module between the
linkage control mode and the display control mode; and
operating the input device in the other of the linkage control mode
and the display control mode.

13. The method of claim 12, wherein switching the mode of
operation includes switching a physical switch.

14. The method of claim 12, wherein switching the mode of
operation includes generating a toggle signal.

15. The method of claim 14, wherein generating the toggle
signal includes performing a predetermined manipulation of the input device.

16. The method of claim 12, further including manipulating
the input device to control the motion of a mechanical linkage when the input
device is operating in the linkage control mode.

17. The method of claim 12, further including manipulating
the input device to input information to the display system when the input device
is operating in the display control mode.

18. A work machine comprising:
a mechanical linkage having a work implement;
a machine display system associated with the work machine for receiving and displaying information;
an input device having a series of input mechanisms adapted to generate a linkage input signal to control the motion of the mechanical linkage and a display input signal to input information to the machine display system;
a control module adapted to operate in one of a linkage control mode where the motion of the mechanical linkage is controlled and a display control mode where the input of information to the machine display system is controlled; and
a switch associated with the interface, the switch being adapted to switch the operating mode between the linkage control mode and the display control mode.

19. The work machine of claim 18, wherein the switch is a toggle switch adapted to switch the control module between the linkage control mode and the display control mode.

20. The work machine of claim 18, wherein the switch includes logic in the control module, adapted to switch the operating mode between the linkage control mode and the display control mode in response to toggle signal.

21. The work machine of claim 18, wherein the control module is adapted to control functions on the machine display system including at least one of a movement of a cursor, an input of information, and a selection of selectable functions.

22. The work machine of claim 18, wherein the control module includes:

a first processor adapted to operate in the linkage control mode;

and

a second processor adapted to operate in the display control mode.

23. An operator interface for a work machine for controlling a machine display and a mechanical linkage, comprising:

an input means for controlling the motion of the mechanical linkage and for controlling an input of information to the machine display;

a control means for operating in one of a linkage control mode where the motion of the mechanical linkage is controlled and a display control mode where the input of information to the machine display is controlled; and

a switching means for switching the operating mode between the linkage control mode and the display control mode.